B.PRODUCTION 3RD. YR 2ND SEM. EXAM.2017 (Old)

INFORMATION TECHNOLOGY

Full Marks: 100 Times: Three Hours

The figures in the margin indicate full marks.

Answer any five of the following questions.

- 1. What do you mean by Network Cabling? Describe various types of Network Cables. Describe briefly Repeaters and Hubs. 3+12+5=20
- 2. What is ARP? Discuss briefly the mechanism of work of ARP. Differentiate ARP and ICMP. Write down the main feature of Network Layer, Data link Layer & Application Layer.

$$2 + 4 + 5 + 9 = 20$$

3. What do you mean by TCP? Differentiate TCP & UDP with applications. Describe various type of network topology.

$$5+6+9=20$$

- 4. What is Database Management System? Give an example of Database Management System. Differentiate between Master and Transaction Files with example. Describe three level of architecture in DBMS with examples. 2+6+6+6=20
- 5. Describe briefly with examples what is normalization? What are the demerits of normalization with example.

Design an ER Model for any Institute Management System. Describe all the tables of the Institute Management System. 3+5+12=20

6. What is Cardinality of relationship? Describe briefly all cardinality of relationship with examples.

Show that "All BCNF relation is a strong 3NF, but not every 3NF relation is BCNF". Discuss various types of Normalization technique with proper example. 2 + 9 + 9 = 20

- 7. Write down the short notes on the following:
- a) Internet Protocol